



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,779	07/24/2001	Hideo Shimazu	017446.0314	3553
22428	7590	12/09/2004	EXAMINER	
FOLEY AND LARDNER			GYORFI, THOMAS A	
SUITE 500			ART UNIT	PAPER NUMBER
3000 K STREET NW				
WASHINGTON, DC 20007			2135	

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/910,779	SHIMAZU, HIDEO	

Examiner	Art Unit	
Tom Gyorfi	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 03 September 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-13 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-13 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____.

DETAILED ACTION

1. The communication filed on 09/03/04 amended claims 1 and 8. Claims 1-13 remain for consideration.

Response to Arguments

2. Applicant's arguments, see Paper No. 8, filed 9/3/04, with respect to the rejection of claims 1 and 8-13 under 35 U.S.C. § 112, 1st paragraph have been fully considered and are persuasive. The rejection under 35 U.S.C. § 112, 1st paragraph of claims 9-13 has been withdrawn.

3. Applicant's arguments, see Paper No. 8, filed 9/3/04, with respect to the rejection(s) of claim(s) 1 and 8 under Admitted Prior Art in view of Barros, claims 2 and 4-5 under Admitted Prior Art and Barros in view of Darcie, claim 3 under Admitted Prior Art and Barros in view of Yoshioka, and claim 6 under Admitted Prior art and Barros in view of Barton have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bowen et al. (U.S. Patent 6,094,649).

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1, 7-9, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (Specification: page 6, lines 10-20) in view of Barros (US 6,307,573), and further in view of Bowen (U.S. Patent 6,094,649).

Referring to Claim 1:

Admission discloses an information search and presentation system comprising: a 3D image converter for outputting 3D image data on the basis of a plurality of aerial photographs obtained by photographing a single area from different places, with a physical position of the area being specified (Admission, page 6, lines 8-20).

Admission does no explicitly disclose "a first database for storing a pair of a textual expression and position information as a unit record, the textual expression pertaining to a name and contents of a landmark existing in the area photographed to obtain the aerial- photographs; a search engine for outputting link information for page data including associated contents from a set of page data on public view in a World Wide Web in response to an input keyword, wherein the first database is not accessible by the search engine; and an 3D image browser for creating a 3D stereoscopic image viewed from a viewpoint position designated by a user on the basis of the 3D image data from said 3D image converter and the viewpoint position, presenting the image to the user, looking up said first database in accordance with an associated information presentation request associated with the position designated by the user, and, if a landmark corresponding to the designated position exists, outputting to said search

engine a textual expression pertaining to a name and contents of the corresponding landmark as a keyword to present a search result obtained by said search engine."

Barros discloses a first database for storing a pair of a textual expression and position information as a unit record (col 12, lines 40-55), the textual expression pertaining to a name and contents of a landmark existing in the area photographed to obtain the aerial- photographs (col 12, line 50-55); a search engine for outputting link information for page data including associated contents from a set of page data on public view in a World Wide Web in response to an input keyword (col 10, lines 30-35 and col 11, lines 40-50), wherein the first database is not accessible by the search engine (col 11, lines 40-50); and an 3D image browser for creating a 3D stereoscopic image viewed from a viewpoint position designated by a user on the basis of the 3D image data from said 3D image converter and the viewpoint position (col 6, lines 40-50 and col 7, lines 10-15), presenting the image to the user (col 6, lines 55-60), looking up said first database in accordance with an associated information presentation request associated with the position designated by the user (col 9, lines 40-45), and, if a landmark corresponding to the designated position exists, outputting to said search engine a textual expression pertaining to a name and contents of the corresponding landmark as a keyword to present a search result obtained by said search engine (col 11, lines 35-55).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the Admission to include a search database for locating landmarks based on keywords and user location. One of ordinary skill in the art would

have been motivated to do this because it would allow the user to retrieve dynamic landmark information (col 10, lines 30-40).

Admission in view of Barros is silent regarding specifically searching the World Wide Web using a keyword provided by a database as a search term. However, Bowen discloses a system comprising the procedural steps of obtaining a textual expression from a database (col. 10, lines 59-65; col. 11, lines 52-60) and providing it as a search term to a search engine to search the World Wide Web (col. 11, line 65 – col. 12, line 8). Bowen is analogous art to Barros because they both pertain to the art of aggregating data for increasing the ease of searching (Barros, col. 3, line 64 – col. 4, line 6; Bowen, col. 4, lines 4-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Admission in view of Barros to search the World Wide Web with a textual expression obtained from a database. One of ordinary skill in the art would have been motivated to do this because it would allow the invention to display current data obtained from a plurality of remote data sources (Barros, col. 4, lines 29-32; Bowen, col. 5, lines 15-17).

Referring to Claim 7:

Admission in view of Barros in view of Bowen discloses the limitations as discussed in Claim 1 above. Barros further discloses said 3D image browser comprises: a 3D image creation section for creating a 3D, stereoscopic image viewed from a viewpoint position designated by the user on the basis of 3D image data from said 3D image converter and the viewpoint position (col 6, lines 40-50 and col 7, lines

10-15); a database access section for accessing said database in accordance with an associated information presentation request associated with the viewpoint position designated by the user (col 9, lines 40-45); and a search control section for, when an access result indicates that a landmark corresponding a designated position exists, outputting to said search engine a textual expression pertaining to a name and contents of the corresponding landmark as a keyword, and presenting a search result output from said search engine (col 11, lines 35-55).

Referring to Claim 8:

Admission discloses an information search and presentation system comprising:
3D image conversion means for outputting image data on the basis of a plurality of aerial photographs obtained by photographing a single area from different places, with a physical position of the area being specified (Admission, page 6, lines 8-20).

Admission does not explicitly disclose "a database for storing a pair of a textual expression and position information as a unit record the textual expression pertaining a name and contents of a landmark existing in the area photographed to obtain the aerial photographs; search means for outputting link information for page data including associated contents from a set of page data on public view in a World Wide Web in response to an input keyword, wherein the database is not accessible by the search means; 3D image creation means for creating a 3D stereoscopic image viewed from a viewpoint position designated by a user on the basis of the 3D image data from said 3D image converter and the viewpoint position; database access means for accessing said

database in accordance with an associated information presentation request associates with the position designated by the user; and search control means for, if an access result indicating that a landmark corresponding to the designated position exists, outputting to said search means a textual expression pertaining to a name and contents of the corresponding landmark as a keyword, and presenting a search result output from said search means."

Barros discloses a database for storing a pair of a textual expression and position information as a unit record the textual expression pertaining a name and contents of a landmark existing in the area photographed to obtain the aerial photographs (col 12, lines 40-55); search means for outputting link information for page data including associated contents from a set of page data on public view in a World Wide Web in response to an input keyword, wherein the database is not accessible by the search means (col 10, lines 30-35 and col 11, lines 40-50); 3D image creation means for creating a 3D stereoscopic image viewed from a viewpoint position designated by a user on the basis of the 3D image data from said 3D image converter and the viewpoint position (col 6, lines 40-50 and col 7, lines 10-15); database access means for accessing said database in accordance with an associated information presentation request associates with the position designated by the user (col 9, lines 40-45); and search control means for, if an access result indicating that a landmark corresponding to the designated position exists, outputting to said search means a textual expression pertaining to a name and contents of the corresponding landmark as

a keyword, and presenting a search result output from said search means (col 11, lines 35-55).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the Admission to include a search database for locating landmarks based on keywords and user location. One of ordinary skill in the art would have been motivated to do this because it would allow the user to retrieve dynamic landmark information (col 10, lines 30-40).

Admission in view of Barros is silent regarding specifically searching the World Wide Web using a keyword provided by a database as a search term. However, Bowen discloses a system comprising the procedural steps of obtaining a textual expression from a database (col. 10, lines 59-65; col. 11, lines 52-60) and providing it as a search term to a search engine to search the World Wide Web (col. 11, line 65 – col. 12, line 8). Bowen is analogous art to Barros because they both pertain to the art of aggregating data for increasing the ease of searching (Barros, col. 3, line 64 – col. 4, line 6; Bowen, col. 4, lines 4-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Admission in view of Barros to search the World Wide Web with a textual expression obtained from a database. One of ordinary skill in the art would have been motivated to do this because it would allow the invention to display current data obtained from a plurality of remote data sources (Barros, col. 4, lines 29-32; Bowen, col. 5, lines 15-17).

Regarding claims 9 and 11:

Barros teaches that two databases (elements 202 and 203 of Figures 2a and 2b) are consulted during the operation of the invention (col. 11, lines 15-20): a base map database containing map elements, and a topical database containing content and display information, including text files and popup annotations (col. 11, lines 30-40). The data stored in the two databases includes textual expressions and positional information (col. 11, line 19), although the exact distribution of records between the databases is unclear. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to store no other information besides a plurality of pairs of textual expressions and position information, as a plurality of unit records, in the base map database while storing all other data pertinent to the invention in the topical database. The motivation for doing so would be to separate the static map data from the dynamic content that may require frequent updates, thus allowing one to make updates without disrupting the basic mapping functionality of the invention.

Regarding claim 13:

Barros discloses that the database access section is customized to display data from the database (col. 10, lines 50-55 and Figure 2a). In addition, it is well known in the art that search engines can be prevented from accessing certain content, such as by means of a robots.txt file. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Admission, Barros, and Bowen to stipulate that the database access section is only capable of

accessing the database, and that the search engine is not capable of accessing the database. The motivation for doing so would be to keep the contents of the database private, allowing only those who are authorized to use the client software to view it.

5. Claims 2 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (Specification: page 6, lines 10-20) in view of Barros (6,307,573) in view of Bowen (6,094,469), and further in view of Darcie et al (US 6,577,714).

Referring to Claim 2:

Admission in view of Barros and Bowen discloses the limitations as discussed in Claim 1 above.

Admission in view of Barros and Bowen does not explicitly disclose “a second database for recording an ID of the user and a viewpoint position of the user; a user position display unit for adding a user position mark indicating a current position of the user to a viewpoint position designated by the user on the stereoscopic image presented by said 3D image browser, extracting a viewpoint position and ID of a distant user from said second database, and presenting the extracted viewpoint position and ID with a distant user position mark indicating the position of the distant user being added; and an interaction connection section for, when the user generates a request for interaction by designating a specific distant user position mark, performing interaction connection upon regarding an ID of a distant user corresponding to a current position of the designated distant user position mark”

Darcie discloses a second database for recording an ID of the user and a viewpoint position of the user (col 8, lines 20-25, 57-65); a user position display unit for adding a user position mark indicating a current position of the user to a viewpoint position designated by the user on the stereoscopic image presented by said 3D image browser (col 12, lines 40-50), extracting a viewpoint position and ID of a distant user from said second database, and presenting the extracted viewpoint position and ID with a distant user position mark indicating the position of the distant user being added (col 2, lines 12-20; col 7, lines 30-45); and an interaction connection section for, when the user generates a request for interaction by designating a specific distant user position mark, performing interaction connection upon regarding an ID of a distant user corresponding to a current position of the designated distant user position mark (col 2, lines 12-20).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Admission in view of Barros and Bowen to include a second database that allows two remote users to interact with each other. One of ordinary skill in the art would have been motivated to do this because it would provide a map-based directory assistance interface that will allow users to located people/business using a interactive map (Darcie: col 1, lines 20-35).

Referring to Claim 4:

Admission in view of Barros and Bowen, and further in view of Darcie discloses the limitations as discussed in Claim 2 above. Darcie further discloses a system

wherein said interaction connection section activates an interaction function program in making connection to a distant user (col 16, lines 25-45).

Referring to Claim 5:

Admission in view of Barros and Bowen, and further in view of Darcie discloses the limitations as discussed in Claim 4 above. Darcie further discloses a system wherein the interaction function program comprises a program for performing interaction connection by using a selected one of electronic mail, telephone, and electronic chat functions (col 16, lines 25-30; Fig. 10a).

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (Specification: page 6, lines 10-20) in view of Barros (US 6,307,573), Bowen (6,094,649), Darcie (6,577,714) and further in view of Yoshioka (US 6,633,763)

Referring to Claim 3:

Admission in view of Barros, Bowen, and Darcie discloses the limitations of Claim 2 above.

Admission in view of Barros, Bowen, and Darcie do not explicitly disclose "wherein said system further comprises a storage section storing the maximum number of distant users, in advance, which indicates the maximum number of current positions of distant users which are to be displayed; and said user position display unit extracts viewpoint positions and IDs of distant users from said second database by a number

equal to the maximum number stored in said storage section in increasing order of distance from the current position of the user, and presenting the extracted viewpoint positions and IDs, with distant user position marks indicating the positions of the distant users being added.”

Yoshioka discloses wherein said system further comprises a storage section storing the maximum number of distant users, in advance (col 1, lines 30-36; col 2, lines 8-12; col 6, lines; col 7, lines 20-30), which indicates the maximum number of current positions of distant users which are to be displayed (col 7, lines 20-30); and said user position display unit extracts viewpoint positions and IDs of distant users from said second database by a number equal to the maximum number stored in said storage section in increasing order of distance from the current position of the user (col 1, lines 30-36), and presenting the extracted viewpoint positions and IDs, with distant user position marks indicating the positions of the distant users being added (col 1, lines 30-36).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Admission, Barros, Bowen, and Darcie to add a maximum number of distant user locations to the display map based on the distance from the current position of a user. One of ordinary skill in the art would have been motivated to do this because it would allow the user to contact a distant user that is within a region of interest to the user (col 1, lines 35-45).

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (Specification: page 6, lines 10-20) in view of Barros (US 6,307,573) in view of Bowen (6,094,649), and further in view of Barton (US 6,442,479).

Referring to Claim 6:

Admission in view of Barros in view of Bowen discloses the limitations of Claim 1 above.

Admission in view of Barros in view of Bowen do not explicitly disclose "a second database for storing user stay information constituted by a pair of a landmark where the user stayed and a stay duration of a user's stay; a log retention section for recording a pair of a viewpoint position of the user and a corresponding time as a movement log; a time storage section storing a minimum stay duration in a landmark area, in advance, which is used to determine whether the user is interested in a specific landmark; a distance storage section storing a distance indicating a range of a landmark area, in advance, which is used to determine whether the user is interested in a specific landmark; a stay duration calculation section for extracting a position of a landmark over which the user passed and a corresponding time from movement logs retained in said log retention section by referring to said second database, and calculating a stay duration in the landmark area from first and last times at which a viewpoint position of the user is located within the range indicated by the distance stored in said distance storage section which corresponds to positions before and after the position of the extracted landmark; a stay landmark determination section for, when the stay duration

output from said stay duration calculation section is not less than the time stored in said time storage section, determining that the user has stayed in the landmark, and adding a unit record constituted by a pair of a landmark name and a stay duration to said second database; an instruction log retention section for recording a unit record constituted by a pair of a landmark name for which an associated information presentation instruction is issued by the user and a designated time as an information presentation instruction log; and a presentation section for outputting all records in said second database and all records in said log retention section in accordance with a totalizing result presentation instruction."

Barton discloses a second database for storing user stay information constituted by a pair of a landmark where the user stayed and a stay duration of a user's stay (col 17, lines 25-30); a log retention section for recording a pair of a viewpoint position of the user and a corresponding time as a movement log (col 17, lines 4-8; col 17, lines 60-65); a time storage section storing a minimum stay duration in a landmark area, in advance, which is used to determine whether the user is interested in a specific landmark (col 17, lines 35-40); a distance storage section storing a distance indicating a range of a landmark area, in advance, which is used to determine whether the user is interested in a specific landmark (col 16, lines 30-40); a stay duration calculation section for extracting a position of a landmark over which the user passed and a corresponding time from movement logs retained in said log retention section by referring to said second database, and calculating a stay duration in the landmark area from first and last times at which a viewpoint position of the user is located within the range indicated

by the distance stored in said distance storage section which corresponds to positions before and after the position of the extracted landmark (col 17, lines 50-60); a stay landmark determination section for determining that the user has stayed in the landmark (col 17, lines 5-10), and adding a unit record constituted by a pair of a landmark name and a stay duration to said second database (col 17, lines 60-68); an instruction log retention section for recording a unit record constituted by a pair of a landmark name for which an associated information presentation instruction is issued by the user and a designated time as an information presentation instruction log (col 16, line 55-col 17, line 5); and a presentation section for outputting all records in said second database and all records in said log retention section in accordance with a totalizing result presentation instruction (col 17, lines 60-65).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Admission in view of Barros and Bowen to determine whether a user visited an landmark while recording the movements of the user. One of ordinary skill in the art would have been motivated to do this because it would allow the system to measure the effectiveness of its marketing campaign.

Admission, Barros, Bowen, and Barton are silent regarding using a minimum duration for staying at a landmark as a requirement for storing records in the second database, but such a step can be demonstrated to be an obvious development over the cited prior art. Recall that the purpose of recording the time spent at a location is to generate data that can be analyzed for marketing and advertising purposes (Barton, col.

17, line 65 – col. 18, line 5). Examiner asserts that in the general case, it is true that the longer a user stays at a location, the more interest said user has regarding said location. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to retain only those records of a user staying at a landmark if the user has stayed for a minimum duration, as this would help prevent the second database from being filled with data records from users who showed little interest in a given location. Thus, it would allow for improved marketing or advertising efforts pertaining to the location by targeting only those users who showed significant interest in the location.

6. Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art in view of Barros and Bowen as applied to claims 1 and 8 above, and further in view of Poole et al. (the article “Distributed Communication Methods and Role-Based Access Control for Use in Health Care Applications”, hereinafter “SQL/RDA”).

Regarding claims 10 and 12, Barros teaches that the server software calls a database access daemon to lookup information in databases (Barros, column 11, lines 15-20). Barros is silent regarding the communication means between the server and the database, thus the use of the Web is not explicitly forbidden. However, SQL/RDA discloses alternate protocols used to access databases (SQL/RDA, paragraphs 4-5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Admission, Barros, and Bowen to use a

protocol like RDA, and not the World Wide Web, to facilitate the communication between the server and the database. The motivation for this would be to promote interoperability between applications in a multi-vendor environment (SQL/RDA, paragraph 7).

Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 20020068585 issued to Chan, Jawe et al. Chan discloses a system and method is to automatically search the required local information for the information user. It can use the information user's personal profile, position history, and query history to generate the next set of information user's required local information. The information search list can also be generated based on the information user profile. This local information accessing system and method will be very useful if the information user is mobile and do not have enough time to search the web.

US 6487495 issued to Gale, William et al. Gale discloses an improved system and method for specifying physical locations when using applications run on navigation systems or other computer platforms that provide navigation- or map-related functions. When requesting a navigation- or map-related function from such an application, a user

specifies a physical location using a keyword instead of specifying the physical location conventionally, such as by street address. A keyword database relates keywords to physical locations. The application uses the keyword database, or a copy thereof, to find data indicating the physical location associated with the keyword specified by the user. Preferably, physical locations are defined in the keyword database in terms of data in a corresponding navigable database. The application then performs the requested navigation- or map-related function using the data indicating the physical location associated with the keyword. The keyword database is built using input from users. An online system is provided that users can access to associate keywords with physical locations. A user accessing the online system is presented with a map from which a physical location can be selected. A keyword, which may be selected by the user, is associated with the selected physical location. The keyword is stored in the keyword database along with data indicating the associated physical location. Keywords can be related to each other in order to facilitate navigation applications that involve routing through multiple locations.

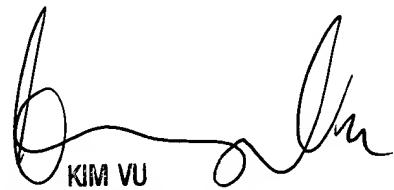
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Gyorfi whose telephone number is (571) 272-3849. The examiner can normally be reached on 8:00am - 4:30pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TAG
12/01/04



KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100